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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,559	01/23/2004	Katsunori Takada	K06-165935M/TBS	3219
21254 7	590 08/15/2006		EXAMINER	
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD			MCNELIS, KATHLEEN A	
SUITE 200	OKINOOSE KOAD		ART UNIT	PAPER NUMBER
VIENNA, VA	22182-3817		1742	
			DATE MAILED: 08/15/2006	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	· · · · · · · · · · · · · · · · · · ·					
Office Action Summary		Application No.	Applicant(s)			
		10/762,559	TAKADA ET AL.			
		Examiner	Art Unit			
		Kathleen A. McNelis	1742			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
WHIC - Exten after: - If NO - Failur Any re	DRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DATE is signs of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing of patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  B6(a). In no event, however, may a reply be tirr  rill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONE	the mailing date of this communication.  D (35 U.S.C. § 133).			
Status						
1)🖂	Responsive to communication(s) filed on <u>08 June 2006</u> .					
,	This action is FINAL. 2b)⊠ This action is non-final.					
• —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-19 is/are pending in the application.  4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed.  Claim(s) 1-19 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
<ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
	e of References Cited (PTO-892)	4) Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  5) Notice of Informat Patent Application (PTO-152) Paper No(s)/Mail Date						

#### Claims Status

Claims 1-19 remain for examination wherein claims 1, 5, 9 and 17 are amended.

### Acknowledgement of RCE

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CRF 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.115, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/8/2006 has been entered.

## **Status of Previous Rejections**

The previous rejections of claims 1-5 and 15 under 35 U.S.C. 102(b) as being anticipated by Iguchi et al. (U.S. Pat. No. 6,270,593) are maintained.

The previous rejection of claims 9 to 14 and 16 to 19 under 35 U.S.C. 103(a) as being anticipated by Iguchi et al. (U.S. Pat. No. 6,270,593) are maintained.

#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

<u>Claims 1 to 8 and 15</u> are rejected under 35 U.S.C. 102(b) as being anticipated by Iguchi et al. (U.S. Pat. No. 6,270,596).

Iguchi et al. is applied as set forth in paragraphs 1-6 of the 12/8/2006 Office Action.

Further, with regard to the amendments to claims 1 and 5: While Iguchi et al. does not disclose that the steel comprises a three-phase texture of ferrite + pearlite + bainite, such would be the case since:

- The steel composition is the same as the instant claimed invention as discussed in the 12/8/2006 office action, and
- 2. The processing step includes heating during rolling or forging up to a temperature of 1050 °C (col. 5 lines 1-6) which examiner asserts is the same or substantially similar to the process disclosed by the instant invention of "...having been hot rolled..."

and would therefore, in the absence of evidence to the contrary, produce the same microstructure.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.

- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 to 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iguchi et al. (U.S. Pat. No. 6,270,596).

Iguchi et al. is applied as set forth in the rejection of claims 1 to 8 and 15 above under 35 U.S.C. 102(b).

Alternatively, Iguchi et al. does not disclose that the steel comprises a three-phase texture of ferrite + pearlite + bainite, such would be expected since:

- 1. The steel composition is the same as the instant claimed invention as discussed in the 12/8/2006 office action, and
- 2. The processing step includes heating during rolling or forging up to a temperature of 1050 °C (col. 5 lines 1-6) which examiner asserts is the same or substantially similar to the process disclosed by the instant invention of "...having been hot rolled..."

and would therefore, in the absence of evidence to the contrary, one of ordinary skill in the art would expect the process to produce the same microstructure.

Claims 9 to 14 and 16 to 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iguchi et al. (U.S. Pat. No. 6,270,596).

Iguchi et al. is applied as set forth in paragraphs 7-11 of the 12/8/2005 Office Action.

Further, regarding the amendments to claims 9 and 17, while Iguchi et al. does not disclose that the steel comprises a three-phase texture of ferrite + pearlite + bainite, such would be expected since:

- The steel composition is the same as the instant claimed invention as discussed in the 12/8/2006 office action, and
- 2. The processing step includes heating during rolling or forging up to a temperature of 1050 °C (col. 5 lines 1-6) which examiner asserts is the same or substantially similar to the process disclosed by the instant invention of "...having been hot rolled..."

and would therefore, in the absence of evidence to the contrary, one of ordinary skill in the art would expect the process to produce the same microstructure.

#### Response to Arguments

Applicant's arguments filed 6/8/2006 have been fully considered but they are not persuasive.

Applicant's arguments are summarized as follows:

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1. Iguchi et al. does not disclose a 3-phase microstructure of ferrite + pearlite + bainite in a high strength pinion shaft which has not been refined by high frequency hardening.

Table 1 of Iguchi does not suggest that the steels are hot rolled to obtain the claimed tissue texture.

Examiner's responses are as follows:

- Examiner's position on the microstructure is stated above in the grounds for rejection. Examiner maintains the position stated on page 5 of the 12/8/2005 Office Action that the disclosed high strength shaft includes a pinion shaft.
   Applicant has not included the limitation that the shaft has not been refined by high frequency hardening in the claims, and the preamble uses "comprising", therefore refining with high frequency hardening is not excluded by the claim limitations.
- 2. The claim language does not include the term "tissue texture", nor is this a recognized metallurgical term known in the art. Iguchi et al. discloses heating during rolling to a temperature of up to 1050 °C (col. 5 lines 1-6) which examiner asserts is the same or substantially similar to the process disclosed by the instant invention of "hot rolling."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen A. McNelis whose telephone number is 571- 272-3554. The examiner can normally be reached on M-F 8:00 AM to 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/10/2006 /KAM

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